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EROSION CONTROL PRE-APPROVED POLICIES

E-1 Use of Temporary Sediment Settling Tanks

EROSION CONTROL PRE-APPROVED NOTES & PLANS

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EROSION/SEDIMENTATION CONTROL - PLAN NOTES

- 1. The approved Construction Sequence shall be as follows:
 - a. Conduct pre-construction meeting.
 - b. Flag or fence clearing limits.
 - c. Post sign with name and phone number of TESC supervisor.
 - d. Install catch basin protection if required.
 - e. Grade and install construction entrance(s).
 - f. Install perimeter protection (silt fence, brush barrier, etc.).
 - g. Construct sediment ponds and traps.
 - h. Grade and stabilize construction roads.
 - i. Construct surface water controls (interceptor dikes, pipe slope drains, etc.) simultaneously with clearing and grading for project development.
 - j. Maintain erosion control measure in accordance with City of Kirkland Standards and manufacturer's recommendations.
 - k. Relocate erosion control measures or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the City TESC minimum requirements.
 - I. Cover all areas within the specified time frame with straw, wood fiber mulch, compost, plastic sheeting, crushed rock or equivalent.
 - m. Stabilize all areas that reach final grade within 7 days.
 - n. Seed or sod any areas to remain unworked for more than 30 days.
 - o. Upon completion of the project, all disturbed areas must be stabilized and best management practices removed if appropriate.
- All work and materials shall be in accordance with City of Kirkland standards and specifications.
- 3. The boundaries of the clearing limits shown on this plan shall be set by survey and clearly flagged in the field by a clearing control fence prior to construction. During the construction period, no disturbance or removal of any ground cover beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the Permittee/Contractor for the duration of construction.
- 4. Approval of this erosion/sedimentation control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
- 5. The implementation of this ESC plan and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the Permittee/Contractor until all construction is approved.
- 6. A copy of the approved ESC plans must be on the job site whenever construction is in progress.
- 7. The ESC facilities shown on this plan must be constructed prior to or in conjunction with all clearing and grading activities in such a manner as to ensure that sediment-laden water does not enter the drainage system or violate applicable water standards. Wherever possible, maintain natural vegetation for silt control.

<u>Erosion – Plan Notes (continued)</u>

- 8. The ESC facilities shall be constructed in accordance with the details on the approved plans. Locations may be moved to suit field conditions, subject to approval by the Engineer and the City of Kirkland Inspector.
- 9. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded (e.g., additional sumps, relocation of ditches and silt fences, etc.) as needed for unexpected storm events. Additionally, more ESC facilities may be required to ensure complete siltation control. Therefore, during the course of construction it shall be the obligation and responsibility of the Contractor to address any new conditions that may be created by his activities and to provide additional facilities over and above the minimum requirements as may be needed.
- 10. The ESC facilities shall be inspected by the Permittee/Contractor daily during non-rainfall periods, every hour (daylight) during a rainfall event, and at the end of every rainfall, and maintained as necessary to ensure their continued functioning. In addition, temporary siltation ponds and all temporary siltation controls shall be maintained in a satisfactory condition until such time that clearing and/or construction is completed, permanent drainage facilities are operational, and the potential for erosion has passed. Written records shall be kept documenting the reviews of the ESC facilities.
- 11. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within 48 hours following a storm event.
- 12. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures, such as wash pads, may be required to ensure that all paved areas are kept clean for the duration of the project.
- 13. All denuded soils must be stabilized with an approved TESC method (e.g. seeding, mulching, plastic covering, crushed rock) within the following timelines:
 - May 1 to September 30 soils must be stabilized within 7 days of grading.
 - October 1 to April 30 soils must be stabilized within 2 days of grading.
 - Stabilize soils at the end of the workday prior to a weekend, holiday, or predicted rain event.
- 14. Where seeding for temporary erosion control is required, fast germinating grasses shall be applied at an appropriate rate (example: annual or perennial rye applied at approximately 80 pounds per acre).
- 15. Where straw mulch is required for temporary erosion control, it shall be applied at a minimum thickness of 2".
- 16. All lots adjoining or having any native growth protection easements (NGPE) shall have a 6' high temporary construction fence (chain link with pier blocks) separating the lot (or buildable portions of the lot) from the area restricted by the NGPE and shall be installed prior to any grading or clearing and remain in place until the Planning Department authorizes removal.

<u>Erosion – Plan Notes (continued)</u>

- 17. Clearing limits shall be delineated with a clearing control fence. The clearing control fence shall consist of a 6-ft. high chain link fence adjacent the drip line of trees to be saved, wetland or stream buffers, and sensitive slopes. Clearing control fences along wetland or stream buffers or upslope of sensitive slopes shall be accompanied by an erosion control fence. If approved by the City, a four-foot high orange mesh clearing control fence may be used to delineate clearing limits in all other areas.
- 18. Off-site streets must be kept clean at all times. If dirt is deposited on the public street system, the street shall be immediately cleaned with power sweeper or other equipment. All vehicles shall leave the site by way of the construction entrance and shall be cleaned of all dirt that would be deposited on the public streets.
- 19. Rock for erosion protection of roadway ditches, where required, must be of sound quarry rock, placed to a depth of 1' and must meet the following specifications: 4"-8" rock/40%-70% passing; 2"-4" rock/30%-40% passing; and 1"-2" rock/10%-20% passing. Recycled concrete shall not be used for construction entrance or temporary stabilization elsewhere on the site.
- 20. If any part(s) of the clearing limit boundary or temporary erosion/sedimentation control plan is/are damaged, it shall be repaired <u>immediately</u>.
- 21. All properties adjacent to the project site shall be protected from sediment deposition and runoff.
- 22. At no time shall more than 1' of sediment be allowed to accumulate within a catch basin. All catch basins and conveyance lines shall be cleaned immediately following removal of erosion control BMPs. The cleaning operation shall not flush sediment-laden water into the downstream system.
- 23. Any permanent retention/detention facility used as a temporary settling basin shall be modified with the necessary erosion control measures and shall provide adequate storage capacity. If the permanent facility is to function ultimately as an infiltration or dispersion system, the facility shall <u>not</u> be used as a temporary settling basin. No underground detention tank, detention vault, or system which backs under or into a pond shall be used as a temporary settling basin.
- 24. All erosion/sedimentation control ponds with a dead storage depth exceeding 6" must have a perimeter fence with a minimum height of 3'.
- 25. The washed gravel backfill adjacent to the filter fabric fence shall be replaced and the filter fabric cleaned if it is nonfunctional by excessive silt accumulation as determined by the City of Kirkland. Also, all interceptor swales shall be cleaned if silt accumulation exceeds one-quarter depth.

<u>Erosion – Plan Notes (continued)</u>

- 26. Prior to the October 1 of each year (the beginning of the wet season), all disturbed areas shall be reviewed to identify which ones can be seeded in preparation for the winter rains. The identified disturbed area shall be seeded within one week after October 1. A site plan depicting the areas to be seeded and the areas to remain uncovered shall be submitted to the Public Works Construction Inspector. The Inspector can require seeding of additional areas in order to protect surface waters, adjacent properties, or drainage facilities.
- 27. Any area to be used for infiltration or pervious pavement (including a 5-foot buffer) must be surrounded by silt fence prior to construction and until final stabilization of the site to prevent soil compaction and siltation by construction activities.
- 28. If the temporary construction entrance or any other area with heavy vehicle loading is located in the same area to be used for infiltration or pervious pavement, 6" of sediment below the gravel shall be removed prior to installation of the infiltration facility or pervious pavement (to remove fines accumulated during construction).
- 29. Any catch basins collecting runoff from the site, whether they are on or off the site, shall have adequate protection from sediment. Catch basins directly downstream of the construction entrance or any other catch basin as determined by the City Inspector shall be protected with a "storm drain protection insert" or equivalent.
- 30. If a sediment pond is not proposed, a baker tank or other temporary ground and/or surface water storage tank may be required during construction, depending on weather conditions.
- 31. Do not flush concrete by-products or trucks near or into the storm drainage system. If exposed aggregate is flushed into the storm system, it could mean re-cleaning the entire downstream storm system, or possibly re-laying the storm line.
- 32. Construction dewatering discharges shall always meet water quality guidelines listed in COK Policy E-1. Specifically, discharges to the public stormwater drainage system must be below 25ntu, and not considered a prohibited discharge (per KMC 15.52.090). Temporary discharges to sanitary sewer require prior authorization and permit from King County Industrial Waste Program (206-263-3000) and notification to the Public Works Construction Inspector.